

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 44-64.

Please add new claims 65-85.

44-64 (Cancelled)

65. (New) An immunoassay method for detection of an antibody against HIV comprising:

contacting a sample suspected of containing an antibody against HIV with at least one antigen mixture selected from the group consisting of

a first antigen mixture comprising

a first antigen comprising a first epitope from an epitope region II of gp 41, of an HIV1-subtype D isolate,
wherein the epitope region II of gp41 includes amino acids 518-533, and

a second antigen comprising a second epitope from an epitope region II of gp41 of a different HIV1 subtype of the M group, and

a second antigen mixture comprising

a third antigen comprising a third epitope from an epitope region I of gp 41, of an HIV1-subtype E isolate,
wherein the epitope region I of gp41 includes amino acids 551-565,
and

a fourth antigen comprising a fourth epitope from an epitope region I of gp41 of a different HIV1 subtype of the M group; and

detecting a signal generated as a measure of said HIV antibody in the sample.

66. (New) The method of claim 65, wherein the first antigen includes an amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, and 34.

67. (New) The method of claim 66, wherein the first antigen includes a partial amino acid sequence of the amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, and 34.

68. (New) The method of claim 67, wherein the partial amino acid sequence is selected from the group consisting of SEQ ID NOs. 35, 36, 37, 38, and 39.

69. (New) The method of claim 67, wherein the partial amino acid sequence has a minimum of 10 amino acids.

70. (New) The method of claim 67, wherein the partial amino acid sequence has a minimum of 7 amino acids.

71. (New) The method of claim 65, wherein said sample comprises a member selected from the group consisting of blood, plasma, serum, urine, and saliva.

72. (New) The method of claim 65, wherein at least one antigen in the antigen mixture selected is bound to a solid phase.

73. (New) The method of claim 65, further comprising separating a solid phase from the sample prior to measuring an amount of the HIV antibody in the sample.

74. (New) The method of claim 65, wherein the third antigen is from an epitope region I, wherein the epitope region I consists of amino acids 551-566.

75. (New) The method of claim 65, further comprising a fifth antigen comprising a fifth epitope from epitope region I or epitope region II of HIV1-subtype O, wherein the epitope region I includes amino acids 570-584, and wherein the epitope region II includes amino acids 581-596.

76. (New) The immunoassay of claim 65, wherein the first and the third antigens are bound to a label which generates a detectable signal when the antigens are bound to the antibody against HIV.

77. (New) An antigen mixture comprising

a first antigen comprising a first epitope from an epitope region II, of an HIV1-subtype D isolate, wherein the epitope region II includes amino acids 518-533, and

a second antigen comprising a second epitope from an epitope region II of gp41 of a different HIV1-subtype of the group M.

78. (New) The antigen mixture of claim 77, wherein the first antigen includes a sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 and 39.

79. (New) The antigen mixture of claim 77, wherein the first antigen includes a partial amino acid sequence of the amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, and 34.

80. (New) The antigen mixture of claim 79, wherein the sequence has a minimum length of 10 amino acids.

81. (New) The antigen mixture of claim 77, further comprising a third antigen comprising a third epitope from epitope region I or epitope region II, of HIV1-subtype O, wherein the epitope region I consists of amino acids 570-584, and wherein the epitope region II consists of amino acids 581-596.

82. (New) An antigen mixture comprising

a first antigen comprising a first epitope from an epitope region I, of an HIV1-subtype E isolate,
wherein the epitope region I includes amino acids 551-565, and

a second antigen comprising a second epitope from the only epitope region I of gp41 of a different HIV1-subtype of the group M.

83. (New) An antigen mixture comprising:

at least one antigen mixture selected from the group consisting of

a first antigen mixture comprising

a first antigen comprising a first epitope from an epitope region II of gp 41, of an HIV1-subtype D isolate,
wherein the epitope region II includes amino acids 518-533, and

a second antigen comprising a second antigen from an epitope region II of gp41 of a different HIV1 subtype of the M group, and

a second antigen mixture comprising

a third antigen comprising a third epitope from an epitope region I of gp 41, of an HIV1-subtype E isolate, wherein the epitope region I includes amino acids 551-565, and

a fourth antigen comprising a fourth epitope from an epitope region I of gp41 of a different HIV1 subtype of the M group.

84. (New) The antigen mixture of claim 83, wherein the first antigen includes an amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39.

85. (New) The antigen mixture of claim 83, wherein the first antigen includes a partial amino acid sequence of the amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, and 34.

86. (New) The antigen mixture of claim 85, wherein the sequence has a minimum length of 7 amino acids.

87. (New) A reagent for the detection of an antibody against HIV by means of an immunoassay comprising at least one antigen mixture of claim 83.